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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,466	06/28/2001	Ryoko Kitano	Q65163	3305

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Washington, DC 20037-3213

EXAMINER

KILKENNY, TODD J

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/15/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,466

Applicant(s)

KITANO ET AL.

Examiner

Todd J. Kilkenney

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 601.01(a). Applicant's declaration fails to identify the application title and fails to check the appropriate box under the "which application is:" heading.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 - 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As currently written, claims 3 – 7 lack antecedent basis throughout. For example, claim 3 recites the limitation "**the** adhesive agent" in line 3 and recites "**the** pressing body" in line 8. Furthermore, claims 4 – 7 all recite the limitation "**the** center side to **the** outside". There is insufficient antecedent basis for these limitations in the claims. These are just a few examples and applicant is asked to review the claims in entirety for other antecedent basis problems.

Furthermore, as to claim 4, it is unclear how "...an adhesive sheet with adhesive

agent applied thereto is pressed against the disc-shaped **substrates...**” as recited in lines 2 and 3, “...in a step of bonding the adhesive agent to the surface of the lower disc-shaped substrate...” as recited in lines 4 and 5. Isn’t the adhesive sheet only applied to the lower disc-shaped substrate in the step of bonding the adhesive agent to the surface of the lower disc-shaped substrate?

Claim Objections

4. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2, while written to depend from claim 1, appears to duplicate only that which has been already claimed by claim 1.

5. Claim 1 is objected to because of the following informalities: In line 2, “has been” should be amended replaced with – have been --. Appropriate correction is required.

6. Claim 3 is objected to because of the following informalities: In line 9, “disk-shaped” should be amended to – disc-shaped – to provide consistent spelling. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 – 4 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Bennett et al (US 6,168,682).

Bennett et al teach a method of manufacturing an optical recording medium comprising first and second disk members bonded together with a pressure sensitive adhesive layer. The method as disclosed by Bennett et al includes at least two steps. In step 1, the pressure sensitive adhesive layer is attached to the inner surface of the first member and laminated thereto. The adhesive layer is suggested to be fed via a release liner to a lamination roll under an angle, preferably at least 20° in order to facilitate expelling of air out of the contact area between the inner surface of the first member and the pressure-sensitive adhesive layer. In step 2, the second member is adhered with its inner surface onto an exposed surface of the pressure sensitive adhesive (i.e. after the release liner has been removed) (Col. 9, line 40 – Col. 10, line 46). Subsequent to attaching the inner surface of the second member to the exposed surface of the pressure sensitive adhesive layer, the second member is further adhered to the adhesive layer, for example by passing a rubber roll over the exposed surface of the second member to provide sufficient lamination pressure (Col. 11, lines 38 – 59). Bennett et al recognize that during steps 1 and/or 2 bubbles may form at the interfaces between the first and/or second inner surfaces. To alleviate this problem, Bennett et al

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suggest transferring the bonded assemblies obtained in step 2 to a hydrostatic pressure chamber where they are subjected to uniform, hydrostatic gaseous pressure, in particular air pressure thereby completely removing the bubbles formed at the interfaces during bonding steps 1 and 2 (Col. 13, lines 34 – 49).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amo et al (EP 0855703) in view of Bennett et al (US 6,168,682).

Amo et al teach a method of laminating disc substrates wherein referring to Fig 19, the method includes pressing an adhesive sheet comprising an adhesive agent to a lower disc-shaped substrate to bond the adhesive agent to the lower disc-shaped substrate (step 4), placing an upper disc-shaped substrate on the lower disc-shaped substrate (step 6) and pressing the upper disc-shaped substrate against the lower disc-shaped substrate to integrally laminate the disc-shaped substrates together (step 7). Amos et al, however, fail to suggest exposing both disc-shaped substrates to a high pressure atmosphere after pressing the upper disc-shaped substrate against the lower disc-shaped substrate.

As discussed in the 102(e) rejection above, Bennett et al teach a method of manufacturing an optical recording medium comprising first and second disk members bonded together with a pressure sensitive adhesive layer. Bennett et al teach subjecting the bonded assembly comprising the first and second disk members to a hydrostatic pressure chamber whereby they are subjected to uniform, hydrostatic gaseous pressure, in particular air pressure. Bennett et al teach that this done to completely remove any bubbles formed at the interfaces between the disk members and the interlaying adhesive (Col. 13, lines 34 – 49).

It therefore would have been obvious to one of ordinary skill in the art at the time of the invention to expose the bonded disc-shaped assemblies of Amos et al to a hydrostatic pressure chamber, as is suggested in manufacturing optical recording medium by Bennett et al in order to provide additional steps to ensure that undesired bubbles at the interface of the adhesive and disc-shaped substrates are completely removed therefrom.

In regard to applicant's claims 5 and 6, Amos et al suggest pressing the upper disc-shaped substrate against the lower disc-shaped substrate from a central portion to an outer portion thereof so that the contact therebetween increases gradually from the central portion to the outer portion (Fig 17; Col. 11, lines 9 – 35).

Conclusion

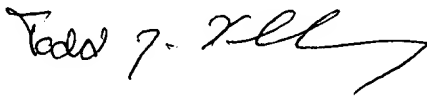
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both US 6,066,218 to Kuhn et al and US 6,004,420 to Nakamura

et al are cited as relevant teachings in the current state of the art for bonding and assembling optical disks together, wherein both references recognize the problem of unwanted bubbles within the assembly.

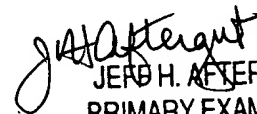
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Todd J. Kilkenny** whose telephone number is **(703) 305-6386**. The examiner can normally be reached on Mon - Fri (9 - 5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



TJK
January 8, 2003



JERROLD H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300